



### Quartz Crystal Filter

● Dimension \*

	A	B	C	D	E	F
UM-1	7.8±0.2	3.0±0.2	7.8±0.2	13.2±1.0	0.35±0.05	3.75
UM-4	7.8±0.2	3.0±0.2	4.3±0.2	13.2±1.0	0.35±0.05	3.75
UM-5	7.8±0.2	3.0±0.2	5.8±0.2	13.2±1.0	0.35±0.05	3.75
H-49T	10.7±0.3	4.4±0.3	11.1±0.3	13.2±1.0	0.43±0.05	4.80

Unit: mm

RoHS Compliant  
Directive 2002/95/EC

REACH Compliant  
(15 SVHCs)  
Regulation (EC) No.  
1907/2006

\* Quartz crystal filters in surface-mounted UM-5 package are also available, contact our sales representatives for more details.

● Electrical Specifications of 2-Pole Crystal Filter

(Operating Temperature Range: -20 to +70°C)

Part No.	Nominal Frequency	Pass Band Bandwidth		Stop Band Bandwidth		Ripple	Insertion Loss	Terminal Impedance	Package
	MHz	dB	KHz	dB	KHz	dB	dB	Rt // Ct (Ω // pF)	
XF10M08A2T1A00	10.700	3	±3.75	20	±18.00	0.5	2.0	1800 // 5	HC-49T
XF10M12A2T1A00	10.700	3	±6.00	18	±20.00	0.5	2.0	3000 // 3	
XF10M15A2T1A00	10.700	3	±7.50	18	±25.00	0.5	2.0	3000 // 2	
XF10M30A2T1A00	10.700	3	±15.00	18	±50.00	0.5	2.0	5000 // 1	
XF21M08A2T1A00	21.400	3	±3.75	18	±14.00	0.5	1.5	850 // 6	UM-1 UM-4 UM-5
XF21M09A2T1A00	21.400	3	±4.50	14	±12.00	0.5	1.5	850 // 7	
XF21M12A2T1A00	21.400	3	±6.00	15	±20.00	0.5	1.5	1200 // 2.5	
XF21M15A2T1A00	21.400	3	±7.50	18	±25.00	0.5	1.5	1500 // 3	
XF21M20A2T1A00	21.400	3	±10.00	10	±25.00	0.5	1.5	1800 // 1.5	
XF21M30A2T1A00	21.400	3	±15.00	15	±45.00	0.5	1.5	3000 // 0.5	
XF21P08A2T1A00	21.600	3	±3.75	18	±14.00	0.5	1.5	850 // 5	
XF21P12A2T1A00	21.600	3	±6.00	15	±20.00	0.5	1.5	1200 // 2.5	
XF21P15A2T1A00	21.600	3	±7.50	18	±25.00	0.5	1.5	1500 // 3	
XF21T07A2T1A00	21.700	3	±3.75	18	±14.00	0.5	1.5	850 // 5	
XF21T09A2T1A00	21.700	3	±4.50	14	±12.50	0.5	1.5	850 // 7	
XF21T12A2T1A00	21.700	3	±6.00	15	±20.00	0.5	1.5	1200 // 2.5	
XF21T15A2T1A00	21.700	3	±7.50	18	±25.00	0.5	1.5	1500 // 3	
XF21T20A2T1A00	21.700	3	±10.00	10	±25.00	0.5	1.5	1800 // 1.5	
XF21T30A2T1A00	21.700	3	±15.00	15	±45.00	0.5	1.5	3000 // 0.5	

- The above information is for reference only. For other frequencies or specifications, please consult with our sales representatives for details.



● **Electrical Specifications of 4-Pole Crystal Filter**  
(Operating Temperature Range: -20 to +70°C)

Part No.	Nominal Frequency	Pass Band Bandwidth		Stop Band Bandwidth		Ripple	Insertion Loss	Terminal Impedance	Package
	MHz	dB	KHz	dB	KHz	dB	dB	Rt // C // Ct ( $\Omega$ // pF // pF)	
XF10M08B4T1A00	10.700	3	$\pm 3.75$	40	$\pm 14.00$	1.0	2.5	1800 // 4 // 12	HC-49T x 2
XF10M12B4T1A00	10.700	3	$\pm 6.00$	40	$\pm 20.00$	1.0	2.5	2800 // 1.5 // 7	
XF10M15B4T1A00	10.700	3	$\pm 7.50$	40	$\pm 25.00$	1.0	2.5	3000 // 1 // 7	
XF10M30B4T1A00	10.700	3	$\pm 15.00$	40	$\pm 50.00$	1.0	2.5	5500 // -1 // 0	
XF21M07B4T1A00	21.400	3	$\pm 3.75$	40	$\pm 14.00$	1.0	2.0	850 // 5 // 16	UM-1 x 2 UM-4 x 2 UM-5 x 2
XF21M08B4T1A00	21.400	3	$\pm 4.00$	40	$\pm 16.00$	1.0	2.0	1000 // 4 // 13.5	
XF21M12B4T1A00	21.400	3	$\pm 6.00$	40	$\pm 20.00$	1.0	2.0	1200 // 2.5 // 10.5	
XF21M15B4T1A00	21.400	3	$\pm 7.50$	40	$\pm 25.00$	1.0	2.0	1500 // 2 // 8	
XF21M30B4T1A00	21.400	3	$\pm 15.00$	40	$\pm 50.00$	1.0	2.0	3300 // 0.5 // 3	
XF21M07B4T1A00	21.400	3	$\pm 3.75$	40	$\pm 14.00$	1.0	2.0	850 // 5 // 16	
XF21M08B4T1A00	21.400	3	$\pm 4.00$	40	$\pm 16.00$	1.0	2.0	1000 // 4 // 13.5	
XF21M12B4T1A00	21.400	3	$\pm 6.00$	40	$\pm 20.00$	1.0	2.0	1200 // 2.5 // 10.5	
XF21M15B4T1A00	21.400	3	$\pm 7.50$	40	$\pm 25.00$	1.0	2.0	1500 // 2 // 8	
XF21M30B4T1A00	21.400	3	$\pm 15.00$	40	$\pm 50.00$	1.0	2.0	3300 // 0.5 // 3	
XF21P07B4T1A00	21.600	3	$\pm 3.75$	40	$\pm 14.00$	1.0	2.0	850 // 5 // 16	
XF21P12B4T1A00	21.600	3	$\pm 6.00$	40	$\pm 20.00$	1.0	2.0	1200 // 2.5 // 10.5	
XF21P15B4T1A00	21.600	3	$\pm 7.50$	40	$\pm 25.00$	1.0	2.0	1500 // 2 // 8	
XF21T07B4T1A00	21.700	3	$\pm 3.75$	40	$\pm 14.00$	1.0	2.0	850 // 5 // 16	
XF21T12B4T1A00	21.700	3	$\pm 6.00$	40	$\pm 20.00$	1.0	2.0	1200 // 2.5 // 10.5	
XF21T15B4T1A00	21.700	3	$\pm 7.50$	40	$\pm 25.00$	1.0	2.0	1500 // 2 // 8	
XF21T30B4T1A00	21.700	3	$\pm 15.00$	40	$\pm 50.00$	1.0	2.0	3300 // 0.5 // 3	

- The above information is for reference only. For other frequencies or specifications, please consult with our sales representatives for details.